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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,701	06/01/2000	Irene Lin	SLA 001	5051

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EXAMINER

ROCHE, LEANNA M

ART UNIT	PAPER NUMBER
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1771

6

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/584,701

Applicant(s)

LIN, IRENE

Examiner

Leanna Roche

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 19-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of Group I (claims 1-18) in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the inventions of Groups I, IV and V are not related as mutually exclusive species because claim 1 states "when the air pressure exerted by the hot air on the first side of the composite film is greater than the air pressure on the other side of the composite film". This is not found persuasive because the examiner has shown that the intermediate product (Group I) can also be useful as a selectively permeable membrane which is different from Applicant's claimed final products (Group IV or V). Because the air pressure conditions specified in Applicant's claims could also be exerted on a selectively permeable membrane, there is insufficient evidence to show the species to be obvious variants.

Thus, the requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "10" and "12" in Figures 2A and 4 both point to the same part. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because Figure 5 does not include the following reference sign(s) mentioned in the

Art Unit: 1771

description: 110. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4, 11, 12, 14, 16, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claims 4 and 14, the phrase "paper-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by materials "like" paper), thereby rendering the scope of the claim(s) unascertainable.

See MPEP § 2173.05(d).

7. Claim 11 recites the limitation "the surface" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner has interpreted this phrase to be "the top face" of the composite film.

8. Claim 16 recites the limitation "the sealing layer" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests amending this claim to show dependency from Claim 11, rather than dependency from Claim 10.

Art Unit: 1771

9. Claim 18 recites the limitation "the polymer layer" in lines 2 and 3 of the claim.

There is insufficient antecedent basis for this limitation in the claim. The examiner has interpreted this phrase to be "the composite film".

10. Claims 4, 12 and 14 contain the trademark/trade name SurlynTM. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a Dupont ionomer and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1771

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1, 2, 4-7, 10-12 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller et al. (USPN 4404241).

Mueller discloses a multi-layer sheet material having apertures and a continuous layer of an extrudable hot melt material bonded thereto, sealing the interstices defining the apertures in the multi-layer sheet. Upon heating, the sealing layer of Mueller softens and flows and permits venting of the air and vapor within the multi-layer substrate article. This reads on Applicant's polymer composite layer having tiny gaps for air permeation having a nonstick sealing layer attached to one side of the polymer composite filling the gaps to prevent air permeation. The apertures in the multi-layer sheet are formed by punching. This reads on impression forming. The multi-layer sheet is comprised of a paper like layer bonded to a polyethylene layer. This reads on a polymer layer comprised of a polyolefin coated paper, or it reads on a first layer comprised of polyethylene and a second layer comprised of synthetic paper. The hot melt material of Mueller may be an ethylene-vinyl acetate wax. This reads on Applicant's sealing layer of a synthetic wax. Figures 1 and 3 of Mueller show apertures which are either evenly distributed or distributed within selected areas.

14. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mueller et al. (USPN 4404241).

With regard to the limitation that the impression process is performed after the sealing layer is formed on one side of the polymer layer, it is the examiner's position that

Art Unit: 1771

the multi-layer sealed sheet material of Mueller is identical to or only slightly different than the composite film prepared by the method of the claim(s), because both disclose a polymer composite of polyolefin coated paper having tiny gaps formed by impression which has a sealing layer of synthetic wax on one side of the polymer composite filling the gaps to prevent air permeation. The wax of the sealing layer is degraded under increased temperature and allows air permeation through the polymer composite. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). Mueller either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the Mueller.

15. Claims 1, 9, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (USPN 4404241).

Mueller does not specifically disclose an additional wax sealing layer attached to the opposite side of the multi-layer sheet material. However, it would have been obvious to the skilled artisan at the time of this invention to provide an additional sealing wax layer on the multi-layer sheet material of Mueller, motivated by the desire to increase the stiffness and strength of the microwave packaging material of Mueller.

Mueller does not specifically disclose that the melting point of their paper-like layer is higher than the melting point of their low density polyethylene layer. However, it is known in the art that many resins used to make synthetic paper possess melting points greater than that of low density polyethylene. Refer to USPN 5257475, Column 3, lines 44-55, for a list of common synthetic fibers used to produce synthetic paper. It would have been obvious to the skilled artisan at the time this invention was made to use a synthetic paper having a melting point greater than low density polyethylene in the microwave packaging material of Mueller, motivated by the desire to increase the ability of the packaging material to resist degradation due to exposure to heat.

16. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (USPN 4404241 as applied to claims 1 and 10 above, and further in view of Inoue (USPN 4769175).

Mueller does not disclose an oxygen scavenger in their multi-layer sealed sheet material. However, Inoue shows that it is known in the art that prevention of oxygen exposure preserves food from becoming rotten. Inoue is directed to a packaging material for food comprised of a fibrous material, such as pulp, polyethylene or polypropylene combined with iron powder and water to form a sheet-like oxygen

scavenging material. The oxygen scavenging material of Inoue may be coated with an additional layer such as an acrylic, polyethylene, polyester or polypropylene which may be porous. It would have been to a person of ordinary skill in the art at the time this invention was made to combine the teachings of Mueller and Inoue, motivated by the desire to produce a microwave packaging material which prevents permeation of oxygen to increase the preservation of the food contained in the package and prevent the food from becoming rotten.

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (USPN 4404241) as applied to claim 1 above, and further in view of Mazurek et al. (USPN 5362500).

Mueller does not specifically disclose an additional wax sealing layer attached to the opposite side of the multi-layer sheet material. Mazurek discloses a packaging material for chewing gum having tissue paper coated on both sides with a wax containing an antioxidant. Mazurek discloses that use of wax layers on both sides of the tissue paper increase the stiffness and strength of the packaging material. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of this invention to combine the teachings of Mueller and Mazurek, motivated by the desire to increase the stiffness and strength of the microwave packaging material of Mueller.

Conclusion

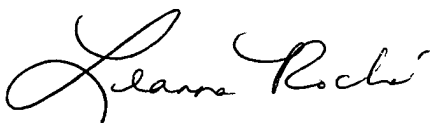
18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanimura (USPN 5257475) shows common synthetic paper fiber resins.

Contact Information

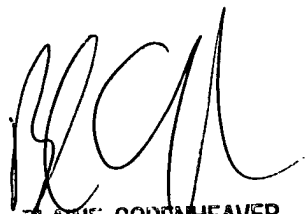
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leanna Roche whose telephone number is 703-308-6549. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm (with alternate Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Imr
January 23, 2002



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